DOCUMENT RESUME

ED 194 206 PS 011 803

AUTHOR Sawyer, Walter E.; Sawyer, Jean C.
TITLE Relationships of Preschool Experiences and Reading Readiness Skills: Predicting the Most Efficient Reading Instruction.
PUB DATE 80
NOTE 14p.; Paper presented at the Annual Convocation of the Northeastern Educational Research Association (Ellenville, NY, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attendance; Cultural Influences; *Early Experience; Educational Television; *Influences; *Kindergarten Children; Language Acquisition; Memory; Primary Education; *Reading Readiness; *Reading Skills; Television Viewing; Visual Perception; Word Recognition
IDENTIFIERS Metropolitan Readiness Tests

ABSTRACT

The purpose of this study was to investigate the relationships between kindergarten children's preschool experiences and their reading readiness skills. A sample of 42 children, randomly selected from a population of incoming kindergarten students at an upstate New York elementary school, was studied. Prior to entering kindergarten, interviews were conducted with the parents of the children in order to collect data for the Preschool Experience Survey. The survey utilizes an information technique to provide measures of preschool cultural experiences, exposure to books and stories, television viewing patterns, and the amount of formal preschool attendance. During the first semester of kindergarten, all subjects were administered the 1976 edition of the Metropolitan Readiness Test (MRT), Level I, Form P. Subjects' performance on the MRT was computed for auditory memory, rhyming, letter recognition, visual matching, school language and listening, quantitative language, and composite scores. Data analysis yielded significant correlations between amount of television viewing and rhyming; between experience with books and rhyming; between experience with books and letter recognition; and between cultural experiences and all subtest areas of the MRT with the exception of auditory memory and visual matching. Further analysis indicated that while the amount of commercial television viewing was not significantly related to general reading readiness or any of the subtest areas, the amount of educational television viewing was significantly and negatively related to general reading readiness. (Author/MP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED194206

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

RELATIONSHIPS OF PRESCHOOL EXPERIENCES AND READING READINESS SKILLS: PREDICTING THE MOST EFFICIENT READING INSTRUCTION

Walter E. Sawyer, Ed. D.
Waterford-Halfmoon School District
Waterford, New York

Jean C. Sawyer
State University of New York
Albany, New York

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Walter E. Sawyer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS011803

A paper presented at the 1980 Annual Convocation of the Northeastern Educational Research Association, Ellenville, New York

The purpose of the study was to determine the relationships between certain preschool characteristics and reading readiness skills of kindergarteners. Since previous research has shown that children are more likely to experience success in particular reading instructional systems with certain well developed skills in reading readiness, and that various systems differ in the kinds of readiness skills required (Richek, 1978), an understanding of the relationships between preschool experiences and reading readiness skills is useful in determining the instructional program into which children are placed.

Review of the literature

Reading achievement occurs as a result of a myriad of variables including heredity, instructional program, intrinsic learner motivation, the learning environment, maturation, and experiential background (Rupley, 1977). Preschool experiential background, which includes exposure to language, formal preschool attendance, cultural experiences, and television viewing patterns, is often cited as a powerful force in relation to learning to read. It is a common belief that each of these factors has a significant relationship with learning to read and reading achievement.

Lomax (1977), studying 28 preschoolers, found that all children identified as having a high interest in reading in preschool had considerable experience with stories at home; this was not true for the children identified as having a low interest in reading. No children were found who showed high interest in reading in preschool but who had little experience with stories at home. In investigating 49 natural

readers, or readers who could already read upon entrance into first grade, Durkin (1961) concluded that, although the group was heterogeneous in terms of intelligence, common factors among the subjects were exposure to a wide variety of books in the home and oral reading by adults and/or siblings who were also willing to answer questions about reading.

Attendance in formal preschools has grown over the past decades. In the United States in 1972, 15.5% of the three year olds and 33.5% of the four year olds were enrolled in some type of group preschool program (Barker, 1972). In the present study, 64% of the subjects had attended a formal preschool program. There is a general consensus that such programs may enhance reading achievement in later schooling (Phi Delta Kappan, 1977).

In addition to formal preschool experience, several other aspects of a child's life may have some role in the language development and reading achievement of the child. The role of television cannot be ignored, especially when preschoolers view it from 30 to 35 hours per week (Busch, 1978). Although Nelson (1973) concluded that the amount of time spent watching television has a negative effect on the rate children learn language, Flood (1975) found that viewing educational television programming was positively related to a pre-reading measure. Finally, the quality and quantity of cultural experiences outside the home must be considered. The Harvard Preschool Project study team concluded that providing access to a diverse variety of situations has particular relevance to language development and later reading achievement (White & Watts, 1973).

One of the shortcomings of studies relating preschool experiences to reading achievement is that they tend to not take into account the variety of instructional approaches (e.g. sound-symbol, sight word, linguistic, etc.). Such a limitation becomes more important in view of the work of Richek (1978). Studying 84 children enrolled in kindergarten, she found that the most appropriate reading readiness skills used to predict reading achievement differed depending on the instructional approach used. For example, the ability to produce letter sounds and blend words together predicted success in a sound-symbol approach, while a high degree of skill in visual discrimination and digit span memory predicted success in a sight word approach. Such findings suggest that preschool experiences should be studied not only in relation to reading achievement, but to reading readiness skills as well. The present study investigated the relationships of four preschool experience variables (i.e. experience with books and stories in the home, formal preschool attendance, cultural experiences and television viewing) with seven reading readiness variables (i.e. auditory memory, rhyming, letter recognition, visual matching, school language and listening, quantitative language and a composite total).

Method

A sample of 42 children was randomly selected from a population of incoming kindergarten students at an upstate New York elementary school. Prior to entering kindergarten, interviews were conducted with the parents of the children in order to collect data for the Preschool Experience Survey. The survey utilizes an informant technique to provide measures of preschool cultural experiences, exposure to books and stories, tele-

vision viewing patterns, and the amount of formal preschool attendance. During the first semester of kindergarten, all subjects were administered the 1976 edition of the Metropolitan Readiness Test (MRT), Level I, Form P; individual subtest scores were computed for auditory memory, rhyming, letter recognition, visual matching, school language and listening, quantitative language, and composite. Means and standard deviations for the MRT are summarized in Table 1. All of the means for the study

- -

Table 1 here

- -

sample were within one standard deviation of the means for the standardization sample. Means and standard deviations were also computed for the four areas of the Preschool Experience Survey and are summarized in Table 2. An increasing awareness on the part of parents concerning the amount of television viewed by young children may account for the slightly lower figure reported by parents in contrast to the figures reported by Busch (1978).

- -

Table 2 here

- -

Analysis

To determine the relationship between the preschool variables and the reading readiness variables, correlation coefficients were determined for all 28 possible combinations. The analysis yielded several significant correlations: between amount of television viewing and rhyming (-.39);

between experience with books and both rhyming (.28) and letter recognition (.28); and between between cultural experiences and all subtest areas of the MRT with the exception of auditory memory and visual matching. Table 3 summarizes these correlations.

- -

Table 3 here

- -

A further analysis was conducted to determine the relationships, if any, which exist between the reading readiness variables and television viewing. To do this, the sample was divided into two groups, one of which reported watching mainly commercial television stations and one of which reported watching mostly educational television stations. Correlation coefficients were computed between the amount of television viewing and each of the seven readiness variables. This further analysis indicated that while the amount of commercial television viewing was not significantly related to general reading readiness or any of the subtest areas, the amount of educational television viewing was significantly and negatively related to general reading readiness (-.34). This negative relationship was even greater in the areas of auditory memory (-.42) and rhyming (-.47). Table 4 summarizes the findings of this further analysis.

- -

Table 4 here

- -

Discussion

Since Richek (1978) determined that letter recognition was necessary for any instructional approach, it was concluded that experience with books, stories and diverse cultural experiences may enhance the readiness skills required for any type of reading instructional approach. This supports the beliefs of many parents and educators as well as lending further support to the work of Durkin (1961), Lomax (1977), and White and Watts (1973). Also, in view of Richek's work, it appears that preschool experience with books and stories may make a particular contribution to a foundation for readiness skills required for a sound-symbol reading instructional approach, while cultural experiences have a similar relationship on a sight word approach. Finally, it was concluded that television viewing may have little value in encouraging the development of any reading readiness skills, and educational television in particular may have a hindering association in the development of the readiness skills necessary for any reading instructional approach.

This final aspect contrasts with the work of both Nelson (1973) and Flood (1975). While Nelson concluded that television in general has a negative effect, this study found that this was true for educational television but not for commercial television viewing. The findings of this study differ even more sharply with the conclusions of Flood, who found that educational television viewing was positively related to a prereading measure.

While the findings reported here do not conclusively contest the value of educational television viewing by preschoolers, they do indicate that one should not necessarily assume that something which is called educational or positively hailed by critics is everything that it

promises. One of the reasons that educational television may have negatively correlated with prereading skills, particularly those dealing with sound, is the fact that television is primarily a visual media with no active involvement on the part of the viewer beyond a passive attentiveness. Language is sound. Whether one utilizes an electronic media symbol or the symbol on the printed page, the primary path to comprehension for the young child is the translation of the visual symbol to some meaningful sound message. It is true that educational television does have a sound track, but that does not negate the fact that it is primarily visual.

A further negative effect of educational television might occur if children learn to view language learning as being primarily an entertainment experience. Primary grade reading instruction can hardly compete with Big Bird for entertainment value.

REFERENCES

Barker, L. Preprimary enrollment: October, 1972. Washington, D. C.: U. S. Department of Health, Education and Welfare, 1972.

Busch, J. S. Television's effects on reading: A case study. Phi Delta Kappan, 1978, 59, 668-670.

Durkin, D. Children who read before grade one. The Reading Teacher, 1961, 14, 163-166.

Flood, J. Predictors of reading achievement: An investigation of selected antecedents to reading. (Doctoral dissertation, Stanford University) Ann Arbor, Michigan: University Microfilms, 1975.

Lomax, C. M. Interest in books and stories at nursery school. Educational Research, 1977, 19, 100-112.

Nelson, K. Structure and strategy in learning to talk. Monograph of the Society for Research in Child Development, 1973, 38(1-2, Serial No. 149).

Richek, M. A. Readiness skills that predict word learning using two different methods of instruction. Reading Research Quarterly, 1978, 13, 200-222.

Rupley, W. H. Reading readiness research: Implications for instructional practices. The Reading Teacher, 1977, 30, 450-453.

White, J. C., & Watts, J. C. Experience and environment: Major influences on the development of the young child. Vol. 1, Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Table 1

Summary of means and standard deviations for Metropolitan Readiness Test, Level 1, Form P subtests and composite raw scores

Source	Number of Items	Mean	S. D.
Auditory Memory	12	9.60	2.55
Rhyming	13	8.81	3.16
Letter Recognition	11	9.90	1.80
Visual Memory	14	12.31	2.21
School Language and Listening	15	11.79	2.28
Quantitative language	11	7.69	2.39
Composite	76	59.50	10.46

(N=42)

Table 2

Summary of raw score means and standard deviations for Preschool Experience Survey sub-classifications

Source	Mean	S. D.
Hours of Preschool Instruction	213.64	217.92
Hours of Television/Week	27.19	13.20
Times Read To/Month	14.88	10.80
Cultural Experiences (8 items possible)	3.88	1.85

(N=42)

Table 3

Correlation coefficients between Metropolitan Readiness Test subtests and Preschool Experience Survey subclassifications

Source	Total hours of preschool instruction	Total hours of TV viewing per month	Times read to per month	Cultural experiences
Auditory Memory	-.02	-.17	.13	.18
Rhyming	.04	-.39***	.28*	.26*
Letter Recognition	.23	-.05	.28*	.36***
Visual Matching	-.03	-.04	-.01	.22
School Language and Listening	.16	.05	.07	.33**
Quantitative Language	.05	.12	.00	.28*
Composite	.09	-.14	.18	.37***

(N=42)

* $p < .05$
** $p < .025$
*** $p < .01$

Table 4

Correlation coefficients between Metropolitan Readiness Test subtests and hours of television viewing by students who viewed primarily educational or commercial stations prior to attending kindergarten

Source	Commercial Stations	Educational Stations
Auditory Memory	-.05	-.42**
Rhyming	-.30	-.47***
Letter Recognition	.02	-.14
Visual Matching	.01	-.07
School Language and Listening	.16	.03
Quantitative Language	.30	-.03
Composite	.02	-.34*
	(N=27)	(N=15)

* $p < .05$
** $p < .025$
*** $p < .01$